



Meeting: **Joint Reservoir Committee & Authority Board**
Agenda Item 2.3

March 18, 2022

Subject: **Proposal for Development of Environmental Water Management “Pilot”**

Requested Action:

Consider authorizing the Executive Director to execute a proposal letter with partners to cooperatively develop terms and conditions for consideration in the Prop 1 Benefit Agreement with the California Department of Fish and Wildlife (CDFW) to incorporate an Environmental Water Manager (EWM) “pilot” as part of the Sites Project implementation.

Detailed Description/Background:

The environmental water manager concept has been considered for the Sites Project starting with the Prop 1 application process. As a reminder, while Prop 1 directs grant funds to very specific public benefit categories, it is envisioned that active and adaptive management of the State’s portion of the Project using an “Environmental Water Manager” concept could lead to even greater environmental outcomes than strict adherence to specific and static contract terms. While it is not the Authority’s direct responsibility to ensure success of the State’s investment in the Project, improved statewide water management resulting from optimized use of Sites environmental water has indirect benefits to all water users.

For the past year, Staff has been working with interested parties to lay the groundwork for the EWM concept with the ultimate goal of integrating the concept into the Sites Project through the Prop 1 benefit agreements. Recently, the Environmental Defense Fund (EDF) and The Nature Conservancy (TNC) have expressed an interest in collaborating with the Authority on developing the concept into a form that would be proposed jointly as a Sites Reservoir “pilot” to the California Department of Fish and Wildlife. Staff is seeking authorization to work with these non-governmental organizations (NGOs) and expend funds to determine the technical, legal, contractual and statutory provisions necessary for the practical implementation of EWM within the Sites Reservoir Project.

The recommended proposal letter that has been developed in cooperation with EDF and TNC is attached and the key terms are summarized as follows:

- All considerations for environmental water management must occur within the framework of the Authority’s Storage Principles and operations planning for the overall Project. A key consideration of the work is to adapt the theoretical EWM concept into practical implementable actions.

- An Advisory Committee will be used to guide the effort. This will help to ensure the end product addresses concerns across multiple stakeholder interests. Staff recommends a representative of the Reservoir Committee participates in the Advisory Committee.
- The primary end product will be a “mini operations plan” specifically geared toward the Sites environmental water and focused on identifying ways to optimize the environmental benefits from the Sites public benefit asset. This plan would not create any new conditions for Prop 1, but this plan could look at slightly different demand and use patterns annually for the environmental water. Similarly, there may be associated monitoring and data needs identified but the plan itself will not commit the Authority to providing this in addition to any Prop 1 requirements. Another end product is a review of legal and statutory conditions that may be necessary.
- The possibility of coordinating operations of Sites environmental water with other State environmental assets (resulting from Prop 1 and other State investments) will be considered.
- The goal is to complete this work during summer 2022 so that the end product can feed into the negotiations of the CDFW Prop 1 benefits agreement. This work will not impact the schedule for receiving final Prop 1 funding award.
- The Authority is committing consulting services of a technical (mostly modeling) and legal nature. The proposal letter may be changed, including adding additional parties, only by mutual consent.
- By signing this proposal letter, EDF and TNC are not supporting or endorsing the Project, but they are committing their resources to aid in developing a pilot that achieves successful outcomes of the environmental water from Sites.

Staff would come back to the Board with the end product and seek authority to incorporate specific terms and conditions in the benefit agreement with CDFW that support implementation for a “pilot” term.

Prior Authority Board Action:

In February 2021, \$100,000 was authorized to be expended on development of the environmental water manager concept. None of these funds were expended.

Fiscal Impact/Funding Source:

The estimated cost for direct consulting services required to fulfill the Authority’s obligations under the proposal letter are estimated to be up to \$100,000. The previously authorized budget transfer for development of the environmental water manager concept under the Amendment 2 work plan in this amount was not expended and rolled over to Amendment 3 within carryover

funds. It is proposed that \$100,000 be reallocated from the Amendment 3 unrestricted reserves to the environmental permitting subject area to cover the anticipated costs for this work. The remaining balance in the 2022 unrestricted reserves after this transfer will be \$4,077,000. There will be support staff time associated with this work which can be covered within the existing Agent/Executive Director and HDR integration contracts. EDF and TNC will provide in-kind staff support to the effort.

Staff Contact:

Ali Forsythe

Primary Service Provider:

TBD

Attachments:

Attachment A: Pilot Project Proposal Letter dated March 06, 2022

EFFECTIVE MANAGEMENT OF SITES ECOSYSTEM WATER

A Pilot Project Proposal

March 6, 2022

Goals

- 1) Demonstrate how an independent Environmental Water Manager (EWM) can optimize the effectiveness of ecosystem water using Sites Reservoir as an example.
- 2) Include provisions from this work in the Prop 1 benefits agreement between CDFW and Sites to enable pilot project implementation as part of the Sites Project, recognizing regional conservation priorities identified by wildlife agencies.

Background

The Sites Project Authority is developing a water storage project that will include 240 thousand acre feet (TAF) of storage space in Sites Reservoir dedicated for ecosystem improvements. The total storage space in Sites is 1.5 million acre feet that will be allocated to various Storage Partners, including the state of California, whose storage objective is to achieve ecosystem improvements. Water will be diverted into storage based on the proportionate share of each Storage Partner's space in the reservoir. The current plan states that approximately 17.5% of all diversions into the reservoir would go into the ecosystem water "account," unless that account is already full.

Releases from Sites Reservoir would be made to meet the needs of the Storage Partners, including the ecosystem improvement benefits specified and paid for through the Water Storage Investment Program (WSIP). WSIP provided \$574.5M for ecosystem benefits from Sites Reservoir. Based on project modeling, the project would deliver an average of 50 TAF of water annually to achieve those ecosystem improvements. Currently, the declared ecosystem objectives include Level 4 refuge water supply and environmental flows in Yolo Bypass, as specified by the California Water Commission's public benefit funding of the project under WSIP.

As planned, decisions regarding the timing and quantities of environmental water releases would be made via a contract with the California Department of Fish and Wildlife (DFW), in coordination with DWR and Reclamation. Given the nature of WSIP regulations and the anticipated contractual terms specified for the public benefit ecosystem allocations, combined with DFW's limited capacities and resources, it is likely that the current plan will result in limited flexibility in the use of Sites' ecosystem water.

In evaluating California's freshwater ecosystem management, the Public Policy Institute of California (PPIC) concluded that the lack of flexibility in managing ecosystem water proved

challenging and that water managers would benefit from a defined quantity of water they could manage flexibly, store, and trade (PPIC, 2017).

To increase the environmental benefits that could be supported with releases from Sites, Environmental Defense Fund (EDF), The Nature Conservancy (TNC) and the Project Authority are proposing to establish an Ecosystem Water Manager to make annual, monthly, and weekly decisions on how to use the ecosystem water. To test the concept, we propose a pilot project to demonstrate how an independent EWM can optimize the use of Site's ecosystem water and storage space through flexible decision-making supported by real-time data and agency coordination. If successful, the scope of an EWM could be expanded such that a broader portfolio of environmental water in California could be managed to maximize ecosystem benefits.¹

Project Team

The project team will include the Sites Project Authority, Environmental Defense Fund and The Nature Conservancy. Anthony Saracino, consultant to EDF, will serve as project lead. Technical and legal support will be provided by the Sites Project Authority and EDF and TNC staff and consultants. An Advisory Committee will be established and members will be selected by mutual agreement between SPA, EDF and TNC. The Advisory Committee will be charged with providing advice and input to the project team during development of the pilot project, and may solicit information from outside sources, such as PPIC and the Delta Science Program.

Project Elements

1. Environmental Objectives

Currently, there are two objectives for use of Sites' ecosystem water: Level 4 refuge supply, and Yolo Bypass flows to benefit Delta smelt and help meet Delta standards. This project element would consist of identifying additional environmental objectives that could be achieved via storage and releases of ecosystem water from Sites. These additional objectives, along with refuge supply and bypass flows, would be part of an ecosystem water use portfolio that would be managed by the EWM to optimize ecosystem benefits.

2. Additional Water Sources

This project element would identify potential sources of water, in addition to the 50 TAF estimated to be annually provided by Sites, that could be acquired through purchase or trade to supplement the amount of water available for ecosystem purposes through Sites releases. For example, a pilot might endeavor to utilize environmental water supplied by other WSIP projects to aggregate environmental water for greater ecosystem benefits. Such an

¹ It is important to note that development of this pilot project does not imply that EDF or TNC supports or endorses the entire Sites Project. EDF and TNC are currently evaluating several Sites' programmatic elements and will determine their positions on the proposed project upon completion of that work.

approach may also inform how an EWM can provide greater systemic water management benefits to achieve specific flow enhancement, habitat or freshwater-dependent species benefits.

While there is a limit on the amount of storage space made strictly available for the storage of environmental water in Sites, there are mechanisms within the project governance structure that allows participants to share or lease space to one another. The EWM approach described in the pilot project will be configured within this framework of these “storage principles.”

3. Data Needs

EWM coordination with Storage Partners, DFW, DWR and Reclamation is a key component of this pilot project. This coordination will require access to and management of a plethora of data for effective communication. This project element would identify the data types, sources and management systems needed to allow real-time decision making and communication related to the use of Sites’ ecosystem water.

4. Legal Review

This element will involve assessing the proposed pilot project to ensure that it complies with all legal requirements, such as the segregation of water for pre-existing regulatory requirements, and, where appropriate, identifies any needed changes in law to provide for creation and implementation of an EWM and pilot project. This element will also identify issues related to potential changes in Place of Use or Points of Diversion related to additional sources and uses of ecosystem water.

5. Environmental Water Operations Plan

An operations plan would be developed for management of Sites’ environmental water. The plan would describe the following:

- a. The scope and authorities of an EWM entity, including a governance and oversight structure.
- b. An expanded list of environmental uses and objectives for Sites’ ecosystem water
- c. A description of the data management system used for decision-making
- d. A plan for communication and coordination with Storage Partners and regulatory agencies
- e. A description of how environmental objectives and uses will be prioritized, and the basis for how ecosystem water management decisions will be made by the EWM.
- f. Consistent with Proposition 1 requirements, the water accounting methodology would demonstrate that water allocations by the EWM are above and “beyond conditions necessary for regulatory compliance.”

- g. An adaptive management plan, including how the science needs of the EWM decisions will be provided and integrated within the broader science programs of the Delta watershed.
- h. A term for the pilot project and an evaluation process for either making the project permanent, adjusting for a new pilot period, or dropping it and going with an inflexible and specific program delivery.

6. Deliverable and Schedule

Each of the project elements will proceed concurrently, culminating in a **Sites Environmental Water Pilot Program** document that contains a summary of each of the project elements, as well as recommendations for any changes to existing regulations or statutes needed to implement the program.

It is anticipated that the pilot program document will be completed by July 1, 2022 and would feed into the development of the CDFW/Sites Prop 1 benefit agreement.

It is anticipated that Sites, EDF, TNC and any other parties involved in the development of this pilot program will continue to engage and advise Sites and CDFW as they negotiate and secure a benefits agreement anticipated by June 2023 and prior to final WSIP Award anticipated by Dec 2023.

By signing this document, the parties are agreeing to collaborate in the implementation of this EWM pilot project proposal and if any changes are necessary, agree to mutually amend this document to reflect a shared understanding of the changes prior to their incorporation.

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| <u>Sites Project Authority</u> | <u>Environmental Defense Fund</u> | <u>The Nature Conservancy</u> |
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| <u>Authorized Signature</u> | <u>Authorized Signature</u> | <u>Authorized Signature</u> |
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